

## REMARKS

### Summary

Claims 1, 3-4, 6-16, 18-25 and 29-34 are pending. Claims 24 and 32 were rewritten to correct typographical errors only. No new matter has been added.

### Finality of Office Action

Applicants respectfully request that the finality of the Office action be withdrawn. In the previous Office Action, the pending claims were rejected under 35 U.S.C. §102(e) as being anticipated by Kobashi (or unpatentable over Kobashi in view of Heguchi or Ha). In the present Office action, the pending claims were rejected under 35 U.S.C. §103(a) as being unpatentable over Mitsui in view of Kobashi (or unpatentable over Mitsui in view of Kobashi and Heguchi or Ha). Thus, it appears that Applicants' arguments in the response to the previous Office Action, filed on January 3, 2006, necessitated the use of an additional reference. Although the Examiner stated that, "Applicants amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, THIS ACTION IS MADE FINAL," the response to the previous Office Action contained no amendment to the claims. Accordingly, Applicants respectfully request that the finality of the Office action be withdrawn in lieu of this and the discussion presented in the response to the previous Office Action.

### Rejection of Claims

Claims 1, 3-4, 6-12, 16, 19-24, 27, and 30-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mitsui (U.S. 5,408,345) in view of Kobashi (U.S. 6,839,107); Claims 13-14 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mitsui in view of Kobashi and Heguchi (U.S. 6,292,237); and Claims 18 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mitsui in view of Kobashi and Ha (U.S. 6,697,138).

Claim 1 recites, *inter alia*, pixel electrodes electrically connected to switching elements through contact holes formed in an insulating layer. The contact holes are

masked in a plan view and each of the pixel electrodes is a diffusively reflective electrode. Such an arrangement permits the use of a diffusively reflective electrode while simultaneously reducing the amount of moiré fringes appearing in the display and maximizing the amount of reflected light from the electrode.

Applicants agree with the Examiner that Mitsui does not disclose an arrangement in which the contact holes are masked in a plan view. The Examiner uses Kobashi to remedy this deficiency, stating that, “it would have been obvious to one of skill in the art at the time the invention was made to mask the contact holes from plan view since one would be motivated to prevent light leakage between neighboring pixels.”

However, nowhere does Kobashi discuss preventing light leakage. Nor does Kobashi teach any particular reason for masking the contact holes, let alone teach masking of the contact holes specifically to prevent light leakage between pixels caused by the contact holes. To the contrary, detrimental effects occur when an excessive portion of the structure on the TFT substrate is covered. For example, extending the shielding layer 23 over the contact hole and pixel electrode reduces the amount of light reflected by the pixel.

Applicants respectfully submit that the Examiner has not provided a legally sufficient reason for asserting that the references are combinable, especially as neither Kobashi nor Mitsui discuss masking the contact holes to prevent light leakage between pixels caused by the contact holes. As the CAFC explained in *In re Fritsch* “[t]he mere fact that the reference could be modified as proposed by the Examiner is not sufficient to establish a *prima facie* case of obviousness.” See *In re Fritsch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000) (Court reversed obviousness rejection involving technologically simple concept because there was no finding as to the principle or specific understanding within the knowledge of a skilled artisan that would have motivated the skilled artisan to make the claimed invention). See MPEP 2144.03.

Applicants, on the other hand, have provided a reason for the arrangement recited in Claim 1: the contact hole is masked to reduce the amount of moiré fringes appearing in the display, a benefit recognized neither by Kobashi nor Mitsui.

Applicants submit that the only reason for modifying the arrangement of Mitsui to mask the holes is provided in the instant application. Thus, the rejection constitutes improper use of hindsight and, as such, uses the Applicants own teachings to bootstrap the rejection. "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. v. SGS Importers Int'l, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995)(citing W.L. Gore & Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13(Fed. Cir. 1983)).

For at least these reasons, Claim 1 is patentable over the cited references.

For similar reasons, Claims 21 and 32 are patentable over the cited references.

In addition, however, Claim 21 recites, *inter alia*, that each pixel electrode and switching element are connected through multiple contact holes. Although the Examiner states that Mitsui teaches such a feature, in all embodiments, each pixel electrode and switching element is connected through but a single contact hole 43 or 143. Accordingly, for at least this additional reason, Claim 21 is patentable over the cited references.

Also, Claim 32 recites, *inter alia*, that the drain electrode has an extension extending from a portion of the drain electrode positioned above the gate electrode, the extension of the drain electrode is connected to the pixel electrode through the contact hole, and the contact hole is adjacent to the scanning line associated with the switching element. Although the Examiner states that Mitsui teaches these features, in all embodiments, the drain electrode does not have an extension, nor is the extension of the drain electrode connected to the pixel electrode. Furthermore, in every embodiment, Mitsui teaches that the contact hole extends perpendicularly away from the scanning line and is adjacent to the gate electrode rather than the scanning line. Accordingly, for at least these additional reasons, Claim 32 is patentable over the cited references.

Claims 3-4, 6-12, 16, 19-20, 22-24, 27, 30-31, and 33-34 are dependent on allowable base claims. As these claims are allowable as dependent claims, there is no requirement for a detailed traverse to be provided in order that the response to the Office action be complete.

### **Conclusion**

In view of the amendments and arguments above, Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an allowance thereof. If for any reason the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned.

Respectfully submitted,



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